SEQ 1 NQYVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 9 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 120618-88-4 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Orn-5	-	undetermined modification

SEQ 1 NQYVXLFPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 10 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 120602-98-4 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Tyr-3	-	iodo<2; I>

SEQ 1 NQYVXLFPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 11 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 42002-32-4 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Tyr-3	-	phenylmethyl<Bzl>
modification	Orn-5	-	(phenylmethoxy)carbonyl<Z>

SEQ 1 NQYVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 12 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 28382-58-3 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description

uncommon modification	Orn-5 -	- -	- undetermined modification

SEQ 1 NQFVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 13 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 28343-15-9 REGISTRY
DR 27562-00-1
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	------ location ------		description
uncommon modification	Orn-5 -	- -	- undetermined modification

SEQ 1 NQYVXLFPWW
==========
HITS AT: 1-3, 4-10

L7 ANSWER 14 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 28343-14-8 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	------ location ------		description
uncommon	Orn-5	-	-
modification	Orn-5	-	(phenylmethoxy)carbonyl<Z>

SEQ 1 NQYVXLFPWW
==========
HITS AT: 1-3, 4-10

L7 ANSWER 15 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 28334-51-2 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	------ location ------		description
uncommon	Orn-5	-	-
modification	Orn-5	-	(phenylmethoxy)carbonyl<Z>

SEQ 1 NQFVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 16 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 27805-48-7 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**

NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	-	-	undetermined modification

SEQ 1 NQYVXLFPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 17 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 27783-64-8 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Orn-5	-	(phenylmethoxy)carbonyl<Z>

SEQ 1 NQYVXLFPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 18 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 23619-01-4 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQYVXLFPYY
==========
HITS AT: 1-3, 4-10

L7 ANSWER 19 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 23512-44-9 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQYVXLFPYF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 20 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 19716-16-6 REGISTRY
DR 11005-77-9
FS PROTEIN SEQUENCE
SQL **10**

NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQWVXLFPWW
==========
HITS AT: 1-3, 4-10

L7 ANSWER 21 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 19659-43-9 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQYVXIFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 22 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 19659-41-7 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQFVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 23 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 6676-11-5 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Orn-5	-	(phenylmethoxy)carbonyl<Z>

SEQ 1 NQYVXLFPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 24 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 6060-42-0 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**
modified

```
 type            ------ location ------         description
-------------------------------------------------------------------------
uncommon         Orn-5           -         -
modification       -             -         undetermined modification
-------------------------------------------------------------------------

SEQ      1 NQYVXLFPFF
            ==========
HITS AT:   1-3, 4-10

L7   ANSWER 25 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   3991-13-7  REGISTRY
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------         description
-------------------------------------------------------------------------
uncommon         Orn-5           -         -
-------------------------------------------------------------------------

SEQ      1 NQYVXLWPWW
            ==========
HITS AT:   1-3, 4-10

L7   ANSWER 26 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   3252-29-7  REGISTRY
DR   11018-02-3
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------         description
-------------------------------------------------------------------------
uncommon         Orn-5           -         -
-------------------------------------------------------------------------

SEQ      1 NQYVXLFPWW
            ==========
HITS AT:   1-3, 4-10

L7   ANSWER 27 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   1481-70-5  REGISTRY
DR   11005-75-7
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------         description
-------------------------------------------------------------------------
uncommon         Orn-5           -         -
-------------------------------------------------------------------------

SEQ      1 NQYVXLFPFF
            ==========
HITS AT:   1-3, 4-10

L7   ANSWER 28 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   1111-57-5  REGISTRY
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------         description
-------------------------------------------------------------------------
```

uncommon Orn-5 - -

SEQ 1 NQYVXLWPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 29 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 865-28-1 REGISTRY
FS PROTEIN SEQUENCE
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NQYVXLFPWF
==========
HITS AT: 1-3, 4-10

```
SEQ      1 NDWVXLYPFF
           ==========
HITS AT:   1-3, 4-10

L7   ANSWER 5 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   182351-66-2  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  10
NTE  cyclic
     modified (modifications unspecified)
-------------------------------------------------------------------------
 type            ------ location ------          description
-------------------------------------------------------------------------
uncommon         Orn-5           -          -
stereo           Tyr-7           -          D
-------------------------------------------------------------------------

SEQ      1 NDWVXLYPFF
           ==========
HITS AT:   1-3, 4-10

L7   ANSWER 6 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   147344-92-1  REGISTRY
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------          description
-------------------------------------------------------------------------
uncommon         Orn-5           -          -
-------------------------------------------------------------------------

SEQ      1 NQWVXLFPFF
           ==========
HITS AT:   1-3, 4-10

L7   ANSWER 7 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   147316-75-4  REGISTRY
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
-------------------------------------------------------------------------
 type            ------ location ------          description
-------------------------------------------------------------------------
uncommon         Orn-5           -          -
-------------------------------------------------------------------------

SEQ      1 NQWVXLFPWF
           ==========
HITS AT:   1-3, 4-10

L7   ANSWER 8 OF 29  REGISTRY  COPYRIGHT 1998 ACS
RN   136207-54-0  REGISTRY
FS   PROTEIN SEQUENCE
SQL  10
NTE  cyclic
     modified
-------------------------------------------------------------------------
 type            ------ location ------          description
-------------------------------------------------------------------------
uncommon         Orn-5           -          -
modification     Tyr-3           -          undetermined modification
modification     Orn-5           -          (phenylmethoxy)carbonyl<Z>
-------------------------------------------------------------------------
```

L7 ANSWER 1 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 202752-14-5 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10**
NTE **cyclic**
modified

type	location		description
uncommon	Orn-5	-	-
modification	Asp-2	-	methyl<Me>
modification	Orn-5	-	acetyl<Ac>

SEQ 1 

HITS AT: 1-3, 4-10

L7 ANSWER 2 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 202752-13-4 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NDWVXLYPWF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 3 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 202752-12-3 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

SEQ 1 NDYVXLYPFF
==========
HITS AT: 1-3, 4-10

L7 ANSWER 4 OF 29 REGISTRY COPYRIGHT 1998 ACS
RN 182422-45-3 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10**
NTE **cyclic**

type	location		description
uncommon	Orn-5	-	-

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 1998 ACS
AN 1993:209087 CAPLUS
DN 118:209087
TI Characterization of the tyrocidine and gramicidin fractions of the tyrothricin complex from Bacillus brevis using liquid chromatography and mass spectrometry
AU Tang, Xue Jun; Thibault, Pierre; Boyd, Robert K.
CS Inst. Mar. Biosci., Natl. Res. Counc., Halifax, NS, B3H 3Z1, Can.
SO Int. J. Mass Spectrom. Ion Processes (1992), 122, 153-79
CODEN: IJMPDN; ISSN: 0168-1176
DT Journal
LA English

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 1998 ACS
AN 1993:209086 CAPLUS
DN 118:209086
TI An investigation of the tyrothricin complex by tandem mass spectrometry
AU Barber, M.; Bell, D. J.; Morris, M. R.; Tetler, L. W.; Monaghan, J. J.; Morden, W. E.; Bycroft, B. W.; Green, B. N.
CS Dep. Chem., UMIST, Manchester, M60 1QD, UK
SO Int. J. Mass Spectrom. Ion Processes (1992), 122, 143-51
CODEN: IJMPDN; ISSN: 0168-1176
DT Journal
LA English

=> d all 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 1998 ACS
AN 1993:209087 CAPLUS
DN 118:209087
TI Characterization of the tyrocidine and gramicidin fractions of the tyrothricin complex from Bacillus brevis using liquid chromatography and mass spectrometry
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CODEN: IJMPDN; ISSN: 0168-1176
DT Journal
LA English
CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 9, 26
AB The tyrothricin peptide complex, isolated from the fermn. broth of Bacillus brevis, is comprised of a basic fraction of cyclic decapeptides (the tyrocidines) and a neutral fraction composed of linear peptides (the gramicidins). Previously, 5 cyclic compds. (tyrocidines A-E) had been characterized by classical chem. procedures, and an addnl. 5 by M. Barber et al. (1992), who employed tandem mass spectrometric anal. of the crude mixt., together with an interpretative strategy based upon mass shifts related to simple amino acid substitutions. In the present work, initial profiling of the tyrothricin complex, using reverse phase liq. chromatog. (HPLC) coupled directly to tandem mass spectrometry via an ionspray interface, showed that the mixt. is extremely complex. Semi-preparative HPLC provided 32 fractions, some of which were still mixts., amenable to anal. by tandem mass spectrometry using

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 1998 ACS
AN 1993:209087 CAPLUS
DN 118:209087
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AU Tang, Xue Jun; Thibault, Pierre; Boyd, Robert K.
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CODEN: IJMPDN; ISSN: 0168-1176
DT Journal
LA English
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ST Bacillus tyrocidine gramicidin fraction HPLC spectrometry; tyrothricin complex mass spectrometry liq chromatog
IT Bacillus brevis
(gramicidin and thyrocidine from, isolation and structure of)
IT 865-28-1 1404-88-2, Tyrothricin 1405-97-6, Gramicidin 1481-70-5 3252-29-7 4419-81-2 4422-52-0 5536-03-8 6377-07-7 8011-61-8, Tyrocidine 19659-41-7 19659-42-8 19716-16-6 58442-65-2 64765-31-7 147316-73-2 147316-74-3 147316-75-4 **147344-92-1**
RL: BIOL (Biological study)
(from Bacillus brevis, isolation and structure of)

the doubly-protonated peptide precursors produced by ionspray ionization. In this way the 10 previously known tyrocidines were confirmed, and structures of an addnl. 18 cyclic variants established with only minor uncertainties (e.g. present techniques could not distinguish Ile from Leu). Six linear gramicidins were known previously, and were confirmed in the present work. In addn., 3 previously unknown variants, of the Val1-gramicidins A, B and C, were discovered, in which the ethanolamide residue at the C-terminus is replaced by a propanolamide residue.

ST Bacillus tyrocidine gramicidin fraction HPLC spectrometry; tyrothricin complex mass spectrometry liq chromatog

IT Bacillus brevis
(gramicidin and thyrocidine from, isolation and structure of)

IT 865-28-1 1404-88-2, Tyrothricin 1405-97-6, Gramicidin 1481-70-5 3252-29-7 4419-81-2 4422-52-0 5536-03-8 6377-07-7 8011-61-8, Tyrocidine 19659-41-7 19659-42-8 19716-16-6 58442-65-2 64765-31-7 147316-73-2 147316-74-3 147316-75-4 **147344-92-1**
RL: BIOL (Biological study)
(from Bacillus brevis, isolation and structure of)

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 1998 ACS

AN 1993:209086 CAPLUS

DN 118:209086

TI An investigation of the tyrothricin complex by tandem mass spectrometry

AU Barber, M.; Bell, D. J.; Morris, M. R.; Tetler, L. W.; Monaghan, J. J.; Morden, W. E.; Bycroft, B. W.; Green, B. N.

CS Dep. Chem., UMIST, Manchester, M60 1QD, UK

SO Int. J. Mass Spectrom. Ion Processes (1992), 122, 143-51
CODEN: IJMPDN; ISSN: 0168-1176

DT Journal

LA English

CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 9, 26

AB Tandem mass spectrometry has been shown to be a powerful technique for detg. the structures of biol. compds. This paper details the mass spectrometric methods employed to characterize the structural variations found within a mixt. of cyclic decapeptides, tyrothricin, produced by the bacterium Bacillus brevis.

ST Bacillus tyrothricin complex tandem mass spectrometry

IT Nomenclature, new natural products
(tryptocidin A)

IT Nomenclature, new natural products
(tryptocidin B)

IT Nomenclature, new natural products
(tryptocidin C)

IT Nomenclature, new natural products
(tryptocidin C1)

IT Nomenclature, new natural products
(tyrocidin A1)

IT Nomenclature, new natural products
(tyrocidin B1)

IT Nomenclature, new natural products
(tyrocidin C)

IT Bacillus brevis
(tyrothricin complex from, tandem mass spectrometry anal. of)

IT 865-28-1 1404-88-2, Tyrothricin 1481-70-5 3252-29-7 19659-42-8 19716-16-6 147316-73-2 147316-74-3 147316-75-4 **147344-92-1**
RL: BIOL (Biological study)
(from Bacillus brevis, tandem mass spectrometry anal. of)